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SUPPORT THE SUSTAINABLE PRODUCTION AND MARKETING OF FISH AND VEGETABLE PRODUCTS FOR URBAN/PERI-URBAN WOMEN

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SDGs:



Country: The Gambia

Project Code: TCP/GAM/3801

FAO Contribution: USD 424 000

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Implementing Partners

Ministry of Agriculture and Ministry of Fisheries, Water Resources and National Assembly Matters.

Beneficiaries

Urban and peri-urban smallholder women farmers, women fish traders and women fish smokers.

Country Programming Framework (CPF) Outputs

CPF Priority Area 3: Strengthened Food and Agriculture and Natural Resources Value Chains for Income Generation and Employment Creation.



BACKGROUND

The Gambia has an estimated population of 1.9 million, of which women constitute 51 percent. About 50 percent of the population lives in rural areas. The country is classified as a Least Developed Country, has an open economy with limited natural resources and was ranked 173 out of 188 in the United Nations' Human Development Report, 2020.

The fisheries subsector contributes around 3.4 percent to the gross domestic product (GDP), with an estimated 200 000 people directly or indirectly dependent on fisheries and related activities for their livelihoods. Fishing is generally carried out by men, while women dominate such post-harvest activities as fish landing, processing, marketing and distribution. It is estimated that 80 percent of fish processors and 50 percent of small-scale fish traders are women. The artisanal (or small-scale) fisheries subsector is believed to make a greater contribution to livelihoods and the economy than the industrial and aquaculture subsectors. Despite this, low market access and high post-harvest losses caused by fish spoilage are pervasive, while some post-harvest practices, such as fish smoking, can be detrimental to the environment and toxic for both producers and consumers.

Fish smoking techniques consume large quantities of firewood and contribute to the emission of greenhouse gases. In addition, the use of inappropriate alternative fuel such as cardboard introduces toxic substances to smoked products, as well as exposing operators to health risks.

It is vital to introduce improved fish processing techniques and appropriate technologies to improve not only the quality and food safety of products, but also health standards and work environments. Providing women with climate-smart fuel-efficient fish processing tools, technologies such as the FAO Thiaroye Technology (FTT) stoves and conservation items would allow the fish produced to meet international food safety requirements and access better markets.

Agriculture also occupies a prime place in the national economy and is a key driver of economic growth. It accounts for approximately 30 percent of GDP and employs nearly half the working population and over 80 percent of the rural working population. However, the sector is relatively undiversified, and is characterized by rain-fed subsistence farming of cereals and a limited range of cash crops, as well as livestock production. Horticultural crop production currently contributes about four percent to GDP and involves over 65 percent of the agricultural labour force. However, despite its potential, the horticulture value chain is faced by several challenges. Specific constraints include inadequate knowledge among growers, traders and distributors, limited response to consumer preferences and high-end market linkages, and limited access to finance and inadequate infrastructures. To boost incomes, raise export earnings and contribute to the socioeconomic development of the country, the subsector needs to adopt a more market-oriented approach.

The aim of the project was to strengthen the capacity of fish processors and traders, especially women, through the production of high-quality fish products, using the FTT and cold chain equipment to improve food security and income opportunities for women fish smokers. The project would also support urban and peri-urban smallholder farmers' production and post-harvest systems through capacity building in efficiency and the effective use of high-quality agri-inputs, promoting vegetable product conservation and storage, and the provision of drip irrigation systems and equipment to women.



IMPACT

The project provided environmentally friendly, innovative technology for fish smoking to help to reduce the demand for fuelwood, thus curbing deforestation. The support provided to urban and peri-urban vegetable gardens has enabled the women beneficiaries to significantly increase the area under irrigation and to plan their production calendar more efficiently.

ACHIEVEMENT OF RESULTS

The project had three outputs.

Output 1 ensured the improvement of infrastructure for urban and peri-urban gardens, making locally produced fresh vegetables available, affordable and easily accessed to markets throughout the year. To this end, three vegetable gardens within urban and peri-urban areas were supported with solar irrigation infrastructure, capacity building, production inputs and accessories. The three gardens employ a total of 400 women. The support enabled the women to significantly increase the area under irrigation, reduce the drudgery of fetching water to irrigate their plots and plan their production calendar more efficiently. The project also supplied 140 kg of seed of assorted vegetable crop varieties to six community vegetable gardens, each with a membership of from 100 to 120 women. Altogether, 700 women benefited from the seed, which lasted for three cropping seasons. In addition, training was provided to 180 women, including 20 young women, in vegetable production techniques for dry and rainy season production, compost making, harvesting, post-harvest handling to retain market value, production planning, value addition and processing.

Output 2 regarded the reduction of fish post-harvest losses and increased opportunities for income generation for fish traders. The project strengthened the cooling chain by supplying efficient cooler boxes to 250 women fish traders and constructing two smoke houses equipped with improved FTT ovens, including training provided in their use. Training was also conducted for 169 women fish value chain actors from 12 fish land sites in post-harvest loss management, improved hygiene, best handling practices and efficient icing techniques.

Under Output 3, the project planned to establish FTT facilities to improve the quality of smoked fish products and generate increased income for women fish smokers. Two fish smoking facilities were constructed, in Brufut and Tanji, and training in smoking techniques was provided to 40 women beneficiaries to enable them to improve the quality of smoked fish products to enhance their marketing and shelf life. A third facility was not constructed as the only available site fell within the harbour expansion programme of Banjul Harbour.



IMPLEMENTATION OF WORK PLAN AND BUDGET

Following delays in the civil works needed to develop irrigation facilities in the selected gardens a no-cost extension of one year was granted. All planned activities were implemented within the planned budget.

The implementation of the project was considered low risk, although plans to construct a fish smoking facility in Banjul were prevented by the new expansion programme of Banjul Harbour.

FOLLOW-UP FOR GOVERNMENT ATTENTION

It is recommended that the interventions introduced by the project be scaled up. Further training should also be provided for operators.

SUSTAINABILITY

1. Capacity development

The project helped to strengthen alliances among the beneficiary group members in each intervention site. The strengthened group dynamics and functions of these associations are likely to survive beyond the project and should contribute towards the sustainability of results.

2. Gender equality

The project specifically targeted women.

3. Environmental sustainability

The project introduced environmentally friendly fish smoking technology that uses less fuelwood and curbs the potential hazards of using excessive fuelwood and cardboard in the fish smoking process.

4. Human Rights-based Approach (HRBA) – in particular Right to Food and Decent Work

The project contributed towards the right to food by enhancing the availability and quality of food, and promoted gender empowerment, environmental conservation and sustainability, specifically with the introduction of the FTT ovens.



5. Technological sustainability

The technologies introduced were appropriate, addressing the needs of the beneficiaries in a sustainable manner. The project also contributed significantly towards capacity building and knowledge development.



6. Economic sustainability

The facilities and infrastructure developed under the project are available to beneficiaries. These will enhance production and productivity. The fish smoking FTTs provided boosted business opportunities for the beneficiaries, attracting the interest of other United Nations agencies and the Government, and promoting FAO's *Four Betters*. This has led to additional financing in the sector to construct more FTT facilities, further enhancing the contribution of fisheries to the local economy.



ACHIEVEMENT OF RESULTS - LOGICAL FRAMEWORK

Expected Impact	Food and Nutrition Security and economic empowerment enhanced		
Outcome	Production, conservation and marketing of fish and vegetable products increased sustainably		
	Indicator	Number of urban and peri-urban women producing and marketing good quality fish and vegetable products (smoked fish, tomatoes, hot pepper, cabbage, etc.).	
	Baseline	0	
	End Target	300 women farmers and 200 fish smokers.	
	Comments and follow-up action to be taken	<p>Three vegetable gardens within the urban and peri-urban area were supported with solar irrigation infrastructure, capacity building, production inputs and accessories. The three gardens employ a total of 400 women. The support enabled the women to significantly increase the area under irrigation, reduce the drudgery of fetching water to irrigate their plots and plan their production calendar more efficiently.</p> <p>Two hundred and fifty women engaged in marketing were provided each with a cooler and accessories to enhance transportation, short-term storage and marketing of fish.</p> <p>Two fish smoking facilities equipped with FTT ovens were established. Each facility is utilized by a cohort of from 20 to 25 women. These women were provided with capacity building in the operation of the FTT, and in hygiene and fish handling.</p>	
Output 1	Locally produced fresh vegetables available, affordable and easily accessed on markets throughout the year		
	Indicators	Target	Achieved
	Number of urban/peri-urban gardens with improved infrastructure.	3+	Yes
Baseline	3		
Comments	Three vegetable gardens within the urban and peri-urban area were supported with solar irrigation infrastructure, capacity building, production inputs and accessories. The three gardens employ a total of 400 women. The support enabled the women to significantly increase the area under irrigation, reduce the drudgery of fetching water to irrigate their plots and plan their production calendar more efficiently.		
Activity 1.1	Inception workshop		
	Achieved	No	
	Comments	An inception workshop was not convened. However, the project communicated with stakeholders and implementing partners, and relevant project documents were shared with them. This enabled them to develop individual workplans and budgets for planned activities. A consultative workshop was subsequently organized to consolidate workplans and to address stakeholder concerns.	
Activity 1.2	Identification of beneficiaries		
	Achieved	Yes	
	Comments	Beneficiaries for both vegetable and fisheries value chains were identified by the Department of Agriculture of the Ministry of Agriculture, and the Department of Fisheries of the Ministry of Fisheries and Water Resources.	
Activity 1.3	Site selection		
	Achieved	Yes	
	Comments	A participatory approach was adopted during site selection. The Department of Agriculture and the Department of Fisheries identified the beneficiary communities and individuals based on their levels of vulnerability and lack of access to improved technology and production inputs.	
Activity 1.4	Procure quality vegetable seeds and fertilizer		
	Achieved	Yes	
	Comments	A total of 140 kg of seeds of assorted vegetable crop varieties was supplied to six community vegetable gardens. Each garden had a membership of from 100 to 120 women, each cultivating an average of ten beds of 1x5 m. Altogether, 700 women benefited from the seed, which lasted for three cropping seasons.	
Activity 1.5	Provision of sustainable water system		
	Achieved	Yes	
	Comments	Three community vegetable gardens with a total membership of 350 women benefited from a solar powered borehole, overhead water tank and ground reservoirs. This allowed beneficiaries to sustainably cultivate 2.5 ha of vegetable crops in two to three successive harvests annually.	

Activity 1.6	Train beneficiaries on good agriculture practices and marketing		
	Achieved	Partially	
	Comments	A total of 180 women, including 20 young women, received training in vegetable production techniques for dry and rainy season production, compost making, harvesting, post-harvest handling to retain market value, production planning, value addition and processing. The training of beneficiaries in marketing by supporting the integration of women in an associative framework and providing the association with an e-commerce platform and all related strategies was not achieved. Although farmers were supported to operationalize their cooperatives, they could not participate in e-commerce, because at this time there was no functional e-commerce platform on which to operate.	
Activity 1.7	Post-distribution monitoring		
	Achieved	Yes	
	Comments	Post-distribution monitoring was conducted monthly by the Department of Agriculture and monthly reports were submitted to the FAO country office.	
Output 2	Reduced fish post-harvest losses and increase opportunity of income generation for fisher traders		
	Indicators	Target	Achieved
	Percentage of women fish traders using cooler/ refrigerated/insulated boxes to reduce fish spoilage.	80%	Yes
Baseline	20%		
Comments	Post-harvest losses constitute a major income loss for fisherfolks. The project and stakeholders together identified ways and means of reducing post-harvest losses. The project focused on strengthening the cool chain by providing efficient cooler boxes to women fish traders and constructing two smoke houses equipped with improved FTT ovens. Training was provided in the operation of the ovens and in post-harvest handling and fish hygiene to improve the shelf life of fish and fish products.		
Activity 2.1	Identify women fish traders in main fish landing sites		
	Achieved	Yes	
	Comments	In collaboration with the Department of Fisheries, 250 women from six major fishing landing sites were identified. Fisheries extension officers from the various landing sites were involved in the exercise. Most beneficiaries benefited from at least two forms of assistance.	
Activity 2.2	Provide 250 cool/insulated boxes, accompanied by fish handling kits		
	Achieved	Yes	
	Comments	High-quality cooler boxes and fish handling kits (knives, tarpaulin, buckets, aprons, gloves) were provided to 250 beneficiaries selected by the Department of Fisheries.	
Activity 2.3	Train fish value chain actors on post-harvest loss management, handling and hygienic practices		
	Achieved	Yes	
	Comments	Training was provided to 169 women fish value chain actors from 12 fish land sites in post-harvest loss management, improved hygiene, best handling practices and efficient icing techniques.	
Activity 2.4	Post-distribution monitoring		
	Achieved	Yes	
	Comments	The Department of Fisheries conducted effective post-distribution monitoring. This exercise involved the Department's extension services.	

Output 3	FTT facilities established for improved quality smoked fish products produced for increased income generation for women fish smokers		
	Indicators	Target	Achieved
	Percentage of women fish smokers using FTT for increased quality of smoked fish produced.	70%	Partially
Baseline	10%		
Comments	Fish smoking is a major economic venture of women in fish landing sites. The women operate in groups within a smoke house. The construction of two new FTT facilities was insufficient to meet the target of 70%. The introduction of the technology has kindled the interest of other development partners in supporting the construction of further FTT facilities. However, the availability of space in congested landing sites is a major challenge.		
Activity 3.1	Identify women fish smokers in main fish landing sites		
	Achieved	Yes	
	Comments	The number of women involved in fish smoking in each of the major fish landing sites was quantified to guide the intervention site selection processes.	
Activity 3.2	Site selection		
	Achieved	Yes	
	Comments	Fish smokers' associations in targeted landing sites were identified and met with to discuss their needs for fish smoking facilities, access to land for construction, membership and interest in collaboration.	
Activity 3.3	Construction of FTT		
	Achieved	Partially	
	Comments	The target was to construct three fish smoking facilities, in Banjul, Brufut and Tanji. The associations were consulted, sites identified, building plans prepared and bill of quantities developed. Construction was successfully completed in Brufut and Tanji. However, in Banjul, owing to the new expansion programme of Banjul Harbour, the only available site fell within the harbour expansion programme and the planned construction for Banjul was cancelled.	
Activity 3.4	Train women fish smokers		
	Achieved	Yes	
	Comments	A total of 40 women beneficiaries from the two FTT facilities along with seven extension staff members and four technical staff members of the Department of Fisheries benefited from two sets of training in the operation and management of the FTT ovens and facility. They were trained in smoking techniques to improve the quality of smoked fish products in order to enhance the marketing and shelf life of the smoked products.	

Partnerships and Outreach

For more information, please contact: Reporting@fao.org

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